

# **Direct Marketing IP Corn and Soybeans to Selected World Markets**

## **Final Report**

Missouri Department of Agriculture  
Missouri Corn Growers Association  
Missouri Seed Improvement Association  
Missouri Soybean Association

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## **Outline of Issue / Problem**

### **Component 1**

The U.K. is the 3<sup>rd</sup> largest organic market in the world, and the 5<sup>th</sup> largest organic producer in the world. The current retail market for organic foods is US\$ 1.97 billion, and it is growing at a rate of 5-10% per year. The U.K. market is expected to reach US\$2.4 billion by 2005. Unlike the U.S. the U.K. grocery stores often set their own organic standards that are even higher than the national organic standards.

Although U.K. dairy and livestock farms need organic feedstuffs for their animals, U.S. farmers are not aware of the market, supply chains and certification requirements to sell to this growing market. Another problem was the Missouri supply chain. We did not know the organic producers or who might be interested in moving a portion of their production to organic production. Furthermore, we did not know where the farmers were located in relation to other organic or potential organic producers or the most cost efficient method of shipping organic corn and soybeans to the U.K.

### **Component 2**

International processors are generally unaware special varieties of corn and soybeans have desired characteristics that can increase their products' yield and/or quality. Furthermore, they are not aware U.S. farmers can grow, harvest, store and ship these varieties to the processor, and, at each step, maintain the purity of these desired characteristics. Although Missouri grain is widely transported by rail, Missouri's identity preserved growers are not familiar with the mechanics and the process of securing rail transportation rates.

## **How the Issue was Approached Via the Project**

### **Component 1**

The first step was researching the U.K. certification requirements and the U.K. grocery store chains' own higher organic standards. A contractor and the Executive Director of the of Missouri Seed Improvement Association traveled to the U.K. to interview the certification organizations, government officials, and grocery store chains to better understand how their certification requirements.

A statewide survey was sent to 10,000 Missouri corn and soybean farmers to determine the number and possible clusters of Missouri farmers producing or interested in producing organic corn and soybeans. The survey included price thresholds at which the farmer would consider organic production, acreage they would be willing to commit to organic product in year one, two and three. The data enabled us to prepare a dot density Missouri map that aided us in identifying clusters of farmers willing to consider organic production.

Next, the Missouri Department of Agriculture recruited four Missouri farmers to travel to the U.K. to learn about the U.K. organic market, certification requirements, the supply chain, and meet with organic feed millers and importers. In addition to the marketing staff of the Missouri Department of Agriculture, the Department's Organic Program Coordinator also participated to better understand the certification requirements.

An in-state transportation study was conducted to identify LASH barge loading points, throughput charges, and experience with handling IP grains.

## **Component 2**

In coordination with the Missouri Department of Agriculture, the Missouri Soybean Association developed and created a technical brochure detailing identity-preserved and specialty soybeans, and translated the brochure into Chinese. The Missouri Department of Agriculture's Taipei, Taiwan office in conjunction with the Missouri Soybean Association targeted and delivered some specialty soybean samples to soy food manufacturers and distributors in Taiwan. The Missouri Soybean Association and the Missouri Department of Agriculture held a technical seminar on identity preservation and specialty soybean production with a large number of soy food manufacturers, soy food distributors and retail store owners near Taipei, Taiwan. The program was designed and translated by MDA Taiwan staff and the Missouri Soybean Association, including a specialty soybean producer with first-hand experience in growing specialty products.

Laboratory analysis has been completed on corn grown throughout MO from the 2003-growing season, showing significant differences in characteristics. For example, the protein content varied 5%, which is extremely significant to feed producers. Promotional and educational data on Identity Preservation and specialty corn products have been translated into Spanish, and distributed to corn users in several areas of Mexico, including the areas surrounding Guadalajara, Monterrey, and Mexico City. Technical seminars have been held in these 3 areas with company personnel to explain the value of this system, as well as how their needs can be met. Samples of 3 types of corn have been sent to the largest users of specialty corn in Mexico to see what meets their needs. Through the supply chain connections, which have been developed, producers can work with the grain industry to supply these corn characteristics to processors, and therefore add value to all links of the chain.

## **Contribution of Public or Private Agency Cooperation**

### **Component 1 and Component 2**

The partners and contributors to this grant included the Missouri Seed Improvement Association, the Missouri Soybean Association and the Missouri Corn Growers Association.

The Missouri organic farmers were some of the largest contributors. At their own expense they accompanied the Missouri Department of Agriculture staff to the U.K. to meet face-to-face with the buyers.

In addition, the Missouri Agricultural Statistics service printed and mailed the survey information to Missouri corn and soybean farmers.

## **Results , Conclusions and Lessons Learned**

### **Component 1**

#### **Market and Market Potential**

There are opportunities for Missouri and other U.S. farmers to market organic soybeans and dry-land peas to U.K. dairy and livestock producers via importers and organic oilseed processors. It is obvious U.S. organic producers and brokers are unaware of the market and the future opportunities. However, there are few opportunities for U.S. organic corn producers. The millers use local products when possible and there is a supply of organic wheat for the ration's energy source. Another concern on the Missouri side was pollen drift in corn and meeting the United Kingdom's strict non-gmo tolerance levels.

#### **Non Organic Feed Derogation**

At this time, U.K. farmers are being encouraged to produce organic milk and meat and to help insure profitability, 10-20% of the rations are not required to be organic (the feeds must still be non-genetically modified). Because protein is a more expensive component of the feed, farmers are choosing to use non-organic protein sources. However, this "derogation" is expected to be lifted July 2005.

#### **Non-Genetically Modified Purity**

A huge concern of the U.K. soybean importers and users was non-gmo purity. Brazilian soybean suppliers have had a 100% perfect record supplying non-gmo soybeans to the U.K. Because Brazil has recently legalized genetically modified soybean production, the U.K. importers are now sourcing soybeans from Bolivia. To due the widespread use of genetically modified soybeans in the U.S., the buyers had concerns about gmo contamination.

#### **Transition from Traditional to Organic Production**

Missouri's corn and soybean farmers were less eager to transition to organic production than anticipated. We quickly learned we should be targeting current organic producers rather than recruiting and training future organic farmers. Convincing Missouri farmers to transition to organic and export at the same time required more salesmanship than we could offer. Missouri is home to many organic farms that could initially supply much of the U.K. market. As traditional farmers learn their fellow Missouri farmers are profitably growing and exporting organic soybeans and dry-land peas, we anticipate this success will drive future organic production.

#### **Dry-land Peas**

The use of organic dry-land peas in the organic feed rations piqued the interest of the Missouri farmers who participated in the U.K. study tour. Missouri farmers have some experience producing dry-land peas. The peas are planted early in the growing season and which reduces the drought risk. Because Missouri has had some drought conditions in recent years, planting dry-land peas is appealing. We learned we can be competitive in the U.K. market. Although Dry-land Peas were not included in the grant, this crop has export potential.

### Certification

For Missouri farms that are ISO 65 (IFOAM) certified, they have immediate access to the U.K. market. In addition, the U.K. has also expressed interest in developing a non-equivalency relationship with the Missouri Department of Agriculture's Organic Program.

### State-wide Survey

We should have anticipated a survey to 10,000 farmers would reach a few vocal farmers only interested in receiving higher prices for their non-organic corn and soybeans. Introducing new ideas resulted in a few angry calls and notes in the prepaid postage.

### Transportation

The original vision included barge loads of organic crops being shipped to U.K. dairy and livestock producers. We now realize to maintain product integrity traditional barges were not practical. However, we did learn one importer only imports containers and another importer has experience and interest in receiving LASH barges. Although the LASH barge freight costs were only slightly better than container rates, the greater savings may be in-country. Unions exclusively haul ocean containers in the U.K. and at a cost of about US\$30 per metric ton. Therefore, shipping by LASH barges could offer a huge savings for our customers.

### Favorable Exchange Rate

At the time of the January 2004, U.K. organic study tour and this report, the dollar had substantially weakened against the British Pound (1US\$ = 1.84 BSP). This correction greatly increased our competitiveness. Because the US dollar was overvalued, we are hopeful the exchange rate will, at least, remain the same.

### Value of Farmers Actively Participating

Three Missouri organic farmers traveled with the Missouri Department of Agriculture staff to learn, first hand, about the challenges and opportunities to selling to the U.K. Now that we have returned and are actively quoting, these farmers now have ownership in the project and more interest in realizing sales as a result of FSMIP grant research and their investment in time and resources.

## **Component 2 - Identity-Preserved Corn Market in Mexico**

### Price Sensitivity

The Mexican corn processors were not as sensitive to price as expected. The greater issue was supply. Obtaining cupos (quotas) can be challenging and finding a corn with higher milling yields allowed for more efficient use of the cupos. Because corn is such an important component of Mexican culture, they "value" corn more than other markets.

### Rail Transportation

We learned that freight costs rule over corn quality and characteristics. A minimum 54 car unit-train (approximately 180,000 bushels) is required for cost efficiencies. Although rail car facilities exist in our State, the facilities are limited. More importantly, Identity-Preserved corn farmers would not have any control of the loading point.

### Laboratory Analysis

Almost all the potential Mexican customers the Missouri Corn Growers Association spoke to were unaware of Identity-Preserved corn. The Mexican buyers could easily understand the Identity-Preserved corn costs more, but they did not see the value. The laboratory analysis provided quantifiable benefits of the Identity-Preserved corn. Furthermore, the various laboratory analysis clearly pointed out they could choose from different varieties of corn to find one that best met their processing needs.

### Samples

Providing samples was more important than we anticipated. Although the laboratory analysis offered a qualitative picture of the corn, the customers still appreciated seeing actual samples.

## **Component 2 - Identity-Preserved Soybean Market in Taiwan**

### Seminars

The seminars attracted 125 attendees who were primarily tofu and soymilk processors. The technical information on the benefits of using Identity-Preserved soybeans was presented in Chinese by native speaking Chinese. In addition to the Missouri Soybean Association staff, a Missouri Identity-Preserved soybean farmer traveled to Taiwan to represent and report to fellow Identity-Preserved soybean farmers on the challenges and opportunities in marketing Identity-Preserved soybeans in Taiwan.

### Market Challenges and Opportunities

Product positioning in a global and commodity based business is extremely challenging. Taiwan is a price sensitive market and processors are hesitant to pay more for quality ingredients. Per capita, Taiwan is the largest consumer in the world of soy-based foods. Although the Identity-Preserved soybean market share is small, it still represents a reasonable market with great growth potential.

### Samples

The Identity-Preserved soybeans provided an excellent opportunity to develop relationships with new potential customers and give them the opportunity to see, first hand, the quality and yield benefits from using Identity-Preserved soybeans. Six soy-food processors received samples.

### Technical Brochures

The technical brochures translated into Chinese were a great educational tool to compliment the seminars. Basically, the brochures described what is an Identity-Preserved soybean and the emphasis on product purity throughout planting, harvesting, storage and shipping.

## **Current and Future Benefits**

## **Component 1**

### Producer Cluster Identification

The statewide survey will enable the Missouri Department of Agriculture to identify Missouri farmers who are interest in producing organic and other identity preserved crops. This will be a great tool.

### U.K. Market Opportunities

As a result of the grant research and the January 2004, U.K. organic study tour, we are optimistic Missouri organic farmers will supply organic dry-land peas and soybeans to the U.K. In fact, at the time of this report, U.K. buyers have contacted the Missouri Department of Agriculture to begin working with Missouri farmers for a non-equivalency certification. In addition, an organic association has inquired about importing food-grade soybeans.

### U.K. Market an Insight of Future Markets

We also believe the strong U.K. organic and health food market will offer insight on the future of the U.S. organic and health food market. For example, 50% of the baby food sold in the U.K. is organic. Another example was the amount of shelf space devoted to glucose-free products.

### LASH Barge Access Points

A grant component included a transportation study, and this component was carried-out at the end of the grant. We learned there was an interest in receiving product loaded in LASH barges. Therefore, we focused the transportation study on developing a list of Missouri LASH barge loading facilities and through put cost to clean and load the barges. This list will be valuable for organic and other Identity Preserved crop domestic shippers and exporters.

## **Component 2 - Identity-Preserved Corn**

### Market Opportunities

The Identity-Preserved corn education component of this grant was extremely important. The Mexican buyers were unaware they needed Identity-Preserved until they were approached by the Missouri Corn Growers Association. Just as importantly, the grant increased Missouri farmers' awareness of Identity-Preserved markets and direct marketing connections. Currently, the Mexico market for food-grade corn is approximately 1.5 million metric tons. Although food-grade corn is the immediate and highest priority market, there may also be a future for identity preserved corn for animal feed.

### Domestic Market Opportunities

As a result of the Identity-Preserved corn presentations, a Missouri farmer-group is in discussion with Mexican corn processing plant to form a joint venture to build a processing plant in Missouri. If this plant becomes a reality, Missouri Identity-Preserved corn farmers will have the opportunity to grow and sell their product domestically.

## **Component 2 - Identity-Preserved Soybeans**

### Market Opportunities

As a result of offering some free samples, a Taiwanese food-grade soybean distributor was able to supply high quality food-grade soybeans to several tofu processors who have traditionally used commodity soybeans. We are optimistic these samples will help us convert users of traditional soybeans to buyers of high quality food-grade soybeans.

### Regional Market Opportunities

With the Missouri Soybean's experience in Taiwan, they believe Taiwan will be a springboard to other long-term markets in region. We are optimistic we will realize long-term sales that will benefit Missouri's soybeans farmers.

### **Additional Information Available**

#### Attachments

- Dot density map
- Survey results
- LASH barge loading sites

#### Contact Person for More Information

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